Chimpanzees, drinking buddies?

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If someone tells you a chimpanzee can be a better drinker than you, will you believe that?

Anecdotes about non-human primates drinking wine are quite common. You may find various news, pictures, and videos of monkeys or chimps boozing wine on the Internet. Still, the fact that wild non-human primates can drink and even be drunk has only been validated recently by a group of researchers led by Kimberley J. Hockings – a behavioral ecologist at Oxford Brookes University [1]. Their finding, published in the Royal Society Open Science, shows that wild chimpanzees at Bossou in Guinea can consume the alcoholic beverage from the raffia palm. The chimps do not suck the alcoholic beverage directly from the palms or use a cup like humans. They use leafy tools (e.g., a leaf-fold, leaf-scoop, or a leaf-sponge) to take sips of the beverage. Such tools are made by detaching nearby leaves and folding or crumpling them in the mouth [2].



Chimpanzee (Pan troglodytes), taken by David J. Stang (CC BY-SA 4.0)

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The alcohol by volume (ABV) of the raffia-palm wine is around 3.1% (equivalent to a light beer) on average and can sometimes be as high as 7%. The longest recorded drinking section of the chimps was about 30 minutes. The researchers estimate that the chimp can consume up to 84.9 ml of ethanol (about three 1000 ml bottles of wine) within half an hour. After consuming a large quantity of wine, chimps also exhibit signs of drunkenness like the modern human. "Some of the chimpanzees at Bossou consumed significant quantities of ethanol and displayed behavioural signs of inebriation", Hockings and her colleagues note in the article.

If the chimps can booze like humans, what are the underlying motivations of the chimps' alcohol-consuming behaviors? Is it because of the natural survival desire, as stated by the 'drunken monkey hypothesis', that alcohol is associated with dietary benefits (e.g., acting as an appetite stimulant or a cue to identify ripe fruit) and consequently helps increase caloric gains? [3,4] Like in modern human society, are there any motivations derived from the social survival desire among wild non-human primates? [4].

With the up-to-date evidence, we have yet to get answers to these questions, but we can imagine that one day a chimpanzee could tell us: 'let's get booze'.

References

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